

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC**

In the Matter of)	
)	
Review of the Commission's Rules)	WT Docket No. 17-200
Governing the 896-901/935-940 MHz Band)	

REPLY COMMENTS OF UNITED PARCEL SERVICE, INC.

United Parcel Service, Inc. ("UPS"), by its attorneys, hereby provides its reply to the comments filed on the Commission's Notice of Proposed Rulemaking ("*NPRM*") in the above-captioned proceeding.¹ As in any rulemaking proceeding initiated by the Commission there are bound to be disagreements over the Commission's proposals and the questions asked of stakeholders. To be sure, in this proceeding, there are a few interested parties that urge the Commission to take no action to realign the band to facilitate the provision of private enterprise broadband ("PEBB"),² and others that swing wide in the other direction, urging the Commission to consider a migration plan to convert the entire 896-901/935-940 MHz band ("900 MHz

¹ *Review of the Commission's Rules Governing the 896-901/935-940 MHz Band*, WT Docket No. 17-200, Notice of Proposed Rulemaking, FCC 19-18 (Mar. 14, 2019) ("*NPRM*"). As a global leader in logistics, UPS operates from approximately 7,900 distinct retail and operations facilities. UPS has for many years relied, and continues to rely, on narrowband private land mobile radio ("PLMR") systems licensed to it in the 896-901/935-940 MHz band (the "900 MHz Band") to support mission-critical business communications and applications in many of its facilities.

² *See* Comments of JVCKENWOOD USA Corporation, WT Docket No. 17-200 at 2, 20 (June 3, 2019) ("JVCKENWOOD USA Corporation Comments"). *See also* Comments of the Critical Infrastructure Coalition, WT Docket No. 17-200 (June 3, 2019) ("CIC Comments") (concluding that "the proposed realignment should not be adopted because the dangers associated with the proposal outweigh any benefits" but assuming the Commission is going to move forward, arguing that the relocation process must be voluntary and must protect incumbents.).

Band”) for broadband services.³ Despite a small number of such outliers, the record as a whole reflects a general agreement in favor of protecting narrowband incumbents while moving forward with the Commission’s proposal to establish a 3/3 MHz broadband segment in the band to serve B/ILT-eligible enterprises. The record also reflects strong support for a realignment achieved through voluntary negotiations and that any new broadband entrants cover all narrowband licensees’ costs of relocation to comparable facilities and operations.⁴

I. CONSIDERATION OF BROADBAND USE IN THE 900 MHZ BAND BEYOND THE PROPOSED 3/3 MHZ SEGMENT IS PREMATURE AT THIS TIME

UPS generally supports the Commission’s tentative proposal to reconfigure the 900 MHz Band to add a PEBB service provided that narrowband operators are adequately accommodated and protected from harmful interference.⁵ There is broad consensus that realigning the 900 MHz Band into two segments serves the competing needs of narrowband incumbents and prospective PEBB entrants assuming certain additional safeguards protecting narrowband operations are set forth in the rules. A 3/3 megahertz broadband segment licensed on a county-by-county or smaller basis would be sufficient to enable PEBB operators to establish operations, while conserving two paired 1.5 and 0.5 megahertz blocks, respectively, for narrowband, site-based licensing, including the relocation of incumbents currently within the portion of the band

³ See Comments of Ericsson, WT Docket No. 17-200 at 4 (May 31, 2019) (“Ericsson Comments”).

⁴ The concept of comparable facilities as incorporated into any rules should recognize, whether explicitly in a voluntarily negotiated relocation arrangement or not, that any final Commission rules that would deprive an incumbent of “comparable facilities,” *e.g.*, because of proximity of an incumbent’s relocated channels to the ultimate sub-band edge and the adjacent sub-band protections adopted by the Commission, would entitle a relocated incumbent to further reimbursement for steps taken to modify the relocated facilities to achieve comparable facilities given the final rules, including but not limited to a further retuning.

⁵ Comments of United Parcel Service, Inc., WT Docket No. 17-200 at 5-7 (June 3, 2019) (“UPS Comments”).

contemplated for future PEBB operations.⁶ The Utilities Technology Council (“UTC”), which broadly represents utilities that operate narrowband communications networks in the 900 MHz Band and adjacent Narrowband PCS channels throughout the country, explains that “a 3/3 MHz broadband segment is the most appropriate size at this time in order to accommodate utilities’ increasing capacity requirements while at the same time preserving spectrum for narrowband utility communications needs.”⁷

Not all commenters join the prevailing view. Ericsson claims that with the advent of broadband in the 900 MHz band, “the need for allocated narrowband services will continue to abate” and “the Commission should consider a migration plan for the entire band to be allocated for broadband services.”⁸ Certainly the need for allocated narrowband services has not abated and any speculation about future abatement is baseless and premature. As it stated in its comments, UPS is currently licensed to operate multi-channel trunked radio systems on 900 MHz B/ILT channels at nine of its most critical hub facilities.⁹ Those systems provide mission-critical push-to-talk voice communications that UPS uses for employee health and safety, hazardous materials response, security and numerous other important business functions.¹⁰ Numerous other commenters also explain the continued importance of their narrowband operations or those of their members.¹¹ Furthermore, UPS is already challenged to find available

⁶ There is general support for the proposed 3/3 megahertz alignment from advocates for broadband in the 900 MHz Band. *See infra* at p. 4.

⁷ UTC Comments at 5.

⁸ Ericsson Comments at 4.

⁹ *See* UPS Comments at 3.

¹⁰ *See id.*

¹¹ *See e.g.*, Comments of the Utilities Technology Council, WT Docket No. 17-200 at 3 (June 3, 2019) (“UTC Comments”) (“These [narrowband communications networks in the 900 MHz land mobile bands] provide mission-critical voice and data services for day-

narrowband channels for large trunked radio systems required to support new near-term infrastructure investments in many prospective hub locations. Unfortunately, UPS’s experience is not unique as in many locations there is a shortage of trunked channels available to commercial/industrial operations in all of the business bands, including 900 MHz.

Notably, although pdvWireless, Inc. (“PDV”) muses that the 5/5 MHz channel option “is appealing from a technical and operational perspective” and suggests in some limited circumstances the Commission might consider it,¹² it “strongly supports the proposal outlined in the NPRM.”¹³ In addition, the other primary advocate and original proponent to realign the 900 MHz Band – the Enterprise Wireless Alliance (“EWA”) – states unequivocally that the proposed 3/3 megahertz broadband sub-band “is consistent with the EWA/PDV Petition, and EWA urges the Commission to retain that band configuration.”¹⁴ In response to some proposals for a 5/5 MHz broadband channel, “EWA considers the proposed 3/3 megahertz broadband segment the appropriate course at this time.”¹⁵

Not only does the record as a whole demonstrate that consideration of any broadband operations beyond the Commission’s 3/3 MHz proposal is currently premature, but any notion of establishing some sort of time table for broadband services to transition beyond the proposed 3/3 MHz, such as that suggested by Ericsson, should be given short shrift. Should the proposed 3/3 MHz realignment be adopted and PEBB services experience a high acceptance rate among

to-day operations and emergency restoration in the aftermath of hurricanes and other events.”); Comments of CIC at 1-3.

¹² Comments of pdvWireless, Inc., WT Docket No. 17-200 at 10 (May 30, 2019) (“PDV Comments”).

¹³ *Id.* at 2.

¹⁴ Comments of the Enterprise Wireless Alliance, WT Docket No. 17-200 at 4 (June 3, 2019) (“EWA Comments”).

¹⁵ *Id.*

B/ILT eligible enterprises – and narrowband operations materially diminish below what the 1.5/5 megahertz alignment are used to support – perhaps the Commission could commence a new rulemaking to consider additional or expanded broadband segments in the band. But unless and until the future reality warrants further action, any such consideration would be premature and based on speculation.

II. THE RECORD REFLECTS A GENERAL CONSENSUS IN FAVOR OF REALIGNMENT REALIZED THROUGH VOLUNTARY NEGOTIATIONS

UPS agrees with the Commission’s proposal that any 900 MHz Band realignment should start with a flexible, voluntary negotiation process between prospective broadband licensees and incumbent narrowband licensees.¹⁶ Further, the Commission should provide maximum flexibility to facilitate these voluntary negotiations between incoming broadband licensees and narrowband incumbents.¹⁷

Commenters that support the addition of a broadband channel in the 900 MHz Band uniformly support a voluntary negotiation and relocation process. For example, the original advocates for realignment of the 900 MHz Band to add a broadband segment—PDV and EWA— both favor a market-driven voluntary exchange process that would allow incumbents to negotiate with prospective broadband licensees.¹⁸ In addition, the representative of many narrowband licensee utilities in the Band—UTC—states that, “*most importantly*, UTC supports

¹⁶ See UPS Comments at 12-14.

¹⁷ See *id.* at 13-14.

¹⁸ See PDV Comments at 13 (“PDV fully supports the NPRM plan to rely on a market-driven voluntary exchange program to replace incumbent frequencies in the proposed broadband segment with frequencies in the narrowband segments.”); EWA Comments at 7 (“EWA agrees with the proposal in the NPRM that the 900 MHz Band transition process commence with a voluntary exchange process in which incumbents are free to negotiate with a prospective broadband licensee for whatever the parties determine is an acceptable arrangement.”).

the Commission’s proposal for a voluntary exchange approach that would provide the incumbent licensees with relocation to comparable facilities and reimbursement of all of their relocation costs.”¹⁹ Moreover, CIC agrees: if the Commission moves forward with its proposal, that “the alignment must be completed using a market-driven, voluntary approach.”²⁰ Similar views are consistently reflected throughout the record.

III. INCUMBENTS SHOULD BE ENTITLED TO COMPARABLE FACILITIES, COVERAGE, AND OPERATIONS, AND TO REIMBURSEMENT OF THEIR COSTS

While UPS believes that good faith voluntary negotiations will lead to a successful realignment, there may be some situations where incumbents and prospective broadband licensees cannot come to terms to free up the 3/3 megahertz segment in a given geography. UPS acknowledges that some form of mandatory relocation process may be necessary to facilitate broadband operations, but even in that circumstance any relocation must be equitable.²¹

Most commenters recognize a prospective need for some process for mandatory relocation to address the potential “holdout problem.” Several commenters, including UPS, emphasized that if negotiations fail and a mandatory relocation or an auction process becomes necessary, the process must provide for coverage of all incumbent costs to relocate to comparable facilities, which will often include far more than retuning radios.²² UPS further commented that the Commission must allow sufficient time for any mandatory relocation—at

¹⁹ UTC Comments at i (emphasis added).

²⁰ CIC Comments at 6.

²¹ Some commenters are adamantly opposed to any mandatory process. For example CIC opposes a mandatory relocation process because it “would both interfere with the free market and potentially jeopardize critical infrastructure communications.” *See id.*

²² *See e.g.*, American Petroleum Institute and the Energy Telecommunications and Electrical Association Comments at 3 (“Such relocations also may not be simple retunings, but may include footprint adjustments to ensure coverage is maintained and interference is minimized.”). *See also* UPS Comments at 14-18.

least 30 months—because of the extensive planning and engineering activities necessary, as well as the consideration of the incumbents’ business operations.²³ Relocation, whether negotiated or imposed, does not change the need to avoid disruptions to a narrowband licensee’s business operations. Many B/ILT narrowband licensees may have cyclical down times that need to be respected during which relocation work is not possible.²⁴ UPS, for example, has a “peak freeze” window during the holiday months when the company strictly limits changes to its technology systems.²⁵

The National Association of Manufacturers (“NAM”) and MRFAC, Inc. (“MRFAC”) propose to minimize the “holdout problem” through express FCC adoption of a mutual obligation to bargain in good faith,²⁶ which parties could enforce by invoking “Commission-authorized mediation.”²⁷ UPS agrees that mediation would be a reasonable intermediate step should there be concern about conduct during negotiations.

Primary broadband advocates PDV and EWA both argue for a mandatory relocation process after a “success threshold” is met in a given geography, measured in terms of a requisite percentage of narrowband incumbents having been voluntarily relocated. While both of these parties recognize that all licensees that are relocated are entitled to comparable facilities and cost reimbursement,²⁸ incumbent licensees should still have a complete opportunity to voluntarily

²³ See UPS Comments at 18-19.

²⁴ See *id.*

²⁵ See *id.*

²⁶ See Comments of National Association of Manufacturers and MRFAC, Inc., WT Docket No. 17-200 at 5-6 (June 3, 2019) (“NAM and MRFAC Comments”). PDV, for example, also appears to endorse the concept of good faith negotiations. See PDV Comments at 14.

²⁷ See NAM and MRFAC Comments at 5-6.

²⁸ PDV agrees that “the entire cost of relocation will be borne by the BB Licensee.” PDV Comments at 15. EWA concurs that the replacement channels must provide comparable

negotiate a relocation package and not be arbitrarily deprived of the opportunity for good faith negotiations once a “success threshold” is achieved.

IV. PEBB LICENSEES IN THE 900 MHZ BAND SHOULD BE SUBJECT TO ADEQUATE TECHNICAL LIMITATIONS TO PROTECT NARROWBAND OPERATIONS

In the *NPRM*, the Commission clearly states, “[w]e propose to make broadband licensees responsible for preventing harmful interference to narrowband operations and for resolving any interference in the shortest time practicable.”²⁹ UPS concurs that the rules should ensure compatibility of PEBB operations with narrowband operations after the realignment.³⁰ The Commission should ensure that similar specific language in Part 27, Subpart P of the rules requires PEBB licensees to protect narrowband incumbents generally and without time limits – before, during, and after the transition of a given area to PEBB operations.³¹ UPS called on the Commission to establish, at a minimum, the following in its rules: an objective, easily measurable interference protection criterion that PEBB licensees must meet; co-channel, adjacent channel, and near-adjacent channel separation criteria; and an emissions mask for PEBB transmissions.³²

Motorola Solutions, Inc. (“Motorola”) includes a specific proposal for protection for narrowband systems, recommending (1) a “power flux density (PFD) around broadband base stations not to exceed 1,000 microwatts/m² over at least 98% of the area within 1 km of the base or repeater station antenna, at 1.6 meters above ground level...” and (2) “broadband transmitter

facilities and that the prospective broadband licensee must pay all reasonable costs. *See* EWA Comments at 7.

²⁹ *NPRM*, ¶ 73.

³⁰ *See* UPS Comments at 10.

³¹ *See id.* *See also* CIC Comments at 7-8; UTC Comments at 2.

³² *See id.*

OOBE limits no greater than -23 dBm/MHz in the band immediately adjacent to the broadband allocation.”³³ UPS continues to evaluate this proposal, but it believes Motorola has identified a good starting point for protection on which to build.

V. PEBB LICENSEE BUILD-OUT REQUIREMENTS SHOULD BE TIED TO A MINIMUM LEVEL OF SERVICE TO B/ILT-ELIGIBLES RATHER THAN COVERAGE OF GENERAL POPULATION

In the *NPRM*, the Commission notes that it typically establishes different performance and construction requirements for different spectrum bands based on considerations relevant to those bands.³⁴ Curiously, however, the Commission seeks comment on “requiring a 900 MHz broadband licensee to provide reliable signal coverage and to offer service to at least 45 percent of the *population* in each of its license areas within six years of the license issuance date...and to at least 80 percent of the *population* in each of its license areas within 12 years from the license issue date....”³⁵ Using population coverage for performance milestones is not relevant to the purpose of the 900 MHz Band, which is an important range of frequencies that should remain dedicated to support the needs of B/ILT-eligibles and the critical missions they serve.³⁶ Other comments raise similar concerns.³⁷

³³ Comments of Motorola Solutions, Inc., WT Docket No. 17-200 at 4 (June 3, 2019). To be clear, these values refer to limits on the broadband licensee in the band with respect to the narrowband licensees within the band, not to OOB into bands adjacent to the 896-901/935-940 MHz band.

³⁴ See *NPRM*, ¶ 60.

³⁵ *Id.* (emphasis added).

³⁶ UPS Comments at 10.

³⁷ See UTC Comments at 24 (“As the Commission acknowledges, this band is more likely to be effectively used for private wireless, and limiting eligibility for broadband licenses to B/ILT and SMR entities would ensure that they would have access to spectrum that they desperately need and would put to effective use.”); Comments of Southern Company Services, Inc., WT Docket No. 17-200 at 5 (June 3, 2019) (“Southern has experienced first-hand the ways in which broadband can provide effective and valuable support to utility operations, and therefore supports the Commission’s efforts in this proceeding to

Population coverage may work well for commercial mobile coverage services, but it is the wrong measure for buildout of PEBB. UTC argues that the Commission should “develop performance requirements that are based on geographic coverage, rather than population coverage.”³⁸ While this is a step in the right direction, UPS submits that geographic coverage still misses the mark. The performance requirements for a broadband licensee should be tied to a minimum, but meaningful, level of providing services to B/ILT-eligible enterprises because that is the only measure that properly relates to the purpose of the Band. While UPS does not propose a specific performance requirement at this time, the Commission should consider adoption of a measure, in each license area, that there be a specified minimum number of PEBB subscribers within a specified period after licensing in order for a licensee to maintain its license.

VIII. CONCLUSION

While some urge no action in this proceeding to realign the 900 MHz Band to facilitate the provision of PEBB, and others would have the Commission consider a migration plan to convert the entire 900 MHz Band for broadband services, the record as a whole overwhelmingly reflects agreement in favor of protecting narrowband incumbents while moving forward with the Commission’s proposal to establish a 3/3 megahertz broadband segment for licensees to serve B/ILT-eligible enterprises. If the Commission realigns the band, such realignment should be achieved through voluntary negotiations between PEBB licensees and narrowband incumbents. Any new broadband entrants must cover all incumbent licensees’ costs of relocation to comparable facilities and operations.

expand the availability of broadband spectrum for utility and CII communications needs.”).

³⁸ UTC Comments at 24.

Respectfully submitted,

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